DETAILED ACTION

1.   This Office Action is response to Applicant Remarks file on 04/30/2009.

Claims 6, 8 and 11 are amended.

Claims 27-32 are new.

EXAMINER'S AMENDMENT

2.   An examiner's amendment to the record appears below. Should the changes
and/or additions be unacceptable to applicant, an amendment may be filed as provided
by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be
submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview
with Eamon Wall on 05/07/2009.

The application is amended as follows:

Claim 22. A computer readable <u>storage</u> medium <u>having stored thereon</u>
computer program code, wherein, when the code is executed by a processor, the
processor performs a method of operating a mobile node having a network layer and a
plurality of network interfaces, each with a respective device driver, the method
comprising the steps of:

transmitting communications from the network layer to any of the network
interfaces by way of a multi-interface driver capable of communication with the
respective device driver corresponding to each respective network interface; and

switching from a first one of the network interfaces to a second one of the

network interfaces by changing the one of the plurality of device drivers with which the

multi-interface driver communicates, while hiding the switching from the network layer,

wherein the switching is hidden from the network layer using a virtual interface, the

virtual interface presenting the appearance of always being an active interface to the

network layer regardless of which of the network interfaces is being used at a given

time.

Allowable Subject Matter

3.   Claims 1, 3, 4, 6, 8, 11, 12, 14, 16, 17, 22 and 27-32 are allowed.

 4.   The following is an examiner's statement of reasons for allowance:

        Consider **claims 1, 14 and 22**. the prior art record Linder et al. (US 2002/0194385

A1) teaches a method of operating a mobile node having a network layer and a plurality

of network interface, each with a respective device driver, the method comprising the

steps of:

        transmitting communications from the network layer to any of the network

interfaces by way of a multi-interface driver capable of communication with the

respective device driver corresponding to each respective network interface (Abstract,

Paragraph [0025], Fig.1 show mobile 10 contain multi-interfaces 14-17 capable of

communication to each respective network interface 21-24) ; and

 switching from a first one of the network interfaces to a second one of the network

interface by changing the one of the plurality of device drivers with which the multi-

interface driver communicates (Paragraphs [0008], [0010-0011] teach switching from one network connection to another and change the connection interface of the mobile node).

However, **Linder alone or in combination fails to suggest or fairly teach**

while hiding the switching from the network layer, wherein the switching is hidden from the network layer using virtual interface, the virtual interface presenting the appearance of always being an active interface to the network layer regardless of which of the network interfaces is being used at a given time.

Claims 3, 4, 12, 16 and 17 are allowable based on their being dependent on the independent claims 1 and 14.

Consider **claims 6, 27 and 30**, the prior art record **Linder teaches** a method of operating a mobile node, comprising:

Identifying at least two available interfaces for communications by the mobile node (Fig.1 show mobile contain at least two network interfaces 14-17).

Dharmadhikari et al. (US 2003/0065816 A1) teaches determining a plurality of characteristics of each of the network interface, wherein the characteristics for each network interface including signal strength value for the network interface and user priority value indicative of a preference of a user of the mobile node for the network interface relative to other network interface (Abstract, Paragraphs [0028-0029], [0044] teach characteristics of the network interface including signal strength).

However, the combination of Linder, Michaelis and Dharmadhikari **fail to suggest or fairly teach**

selecting one of the network interfaces based on the characteristics of the

respective network interface;

wherein a weight applied to the user priority value for each network interface

depends on the respective signal strength for the network interface; and communicating

by way of the selected network interface;

wherein the mobile node is communicating by way of a current network interface

connection associated with a current network interface other than the selected network

interface, the method further comprising:

establishing a connection between the mobile node and the selected network

interface;

maintaining the current network interface connection until after the connection

between the mobile node and the selected network interface is established, and

communicating by way of the selected network interface.

Consider **claims 8, 28 and 31**, the prior art record **Linder teaches** a method of

operating a mobile node, comprising:

identifying at least two available network interfaces for communications by the

mobile node, wherein one of the at least two available network interfaces is a current

network interface associated with a current network interface connection by which the

mobile node is currently communicating (Fig.1 show mobile contain at least two network interfaces 14-17).

Dharmadhikari teaches determining a plurality of characteristics of each of the available network interfaces, wherein the characteristics for each available network interface include a signal strength value for the available network interface and a user priority value indicative of a preference of a user of the mobile node for the available network interface relative to other network interfaces (Abstract, Paragraphs [0028-0029], [0044] teach characteristics of the network interface including signal strength).

However, the combination of Linder and Dharmadhikari **fail to suggest or fairly teach**

for each available network interface, calculating a score for the available network interface based on the characteristics of the available network interface;

wherein, for each of the available network interfaces, a weight coefficient applied to the user priority value for the available network interface depends on the respective signal strength for the available network interface;

wherein the scores for the available network interfaces are calculated by applying a higher weight coefficient to the signal strength of the current network interface than to any other available network interface;

selecting one of the available network interfaces based on the respective scores calculated for the available network interfaces; and

communicating by way of the selected network interface.

Consider **claims 11, 29 and 32,** the prior record **Linder teaches** a method of operating a mobile node, comprising:

identifying at least two available network interfaces for communications by the

mobile node, wherein one of the at least two available network interfaces is a current

network interface associated with a current network interface connection by which the

mobile node is currently communicating (Fig.1 show mobile contain at least two network interfaces 14-17).

Dharmadhikari teaches determining a plurality of characteristics of each of the

available network interfaces, wherein the characteristics for each available network

interface include a signal strength value for the available network interface and a user

priority value indicative of a preference of a user of the mobile node for the available

network interface relative to other network interfaces (Abstract, Paragraphs [0028-0029], [0044] teach characteristics of the network interface including signal strength).

However, the combination of Linder and Dharmadhikari **fail to suggest or fairly teach**

selecting one of the available network interfaces based on the respective scores

calculated for the available network interfaces; and

communicating by way of the selected network interface;

communicating by way of the selected network interface;

wherein, for each available network interface, a weight coefficient applied to the user priority value for the available network interface depends on the respective signal strength for the available network interface;

wherein a weight coefficient of zero is applied to the user priority value for each available network interface having a signal strength below a respective threshold value for the available network interface;

wherein the threshold value for the current network interface is lower than the threshold values for other network interfaces.

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIET DOAN whose telephone number is (571)272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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